IEC/IEEE 60802 JP TSN Industrial Profile

Network Configuration & Stream Configuration

- to be discussed -

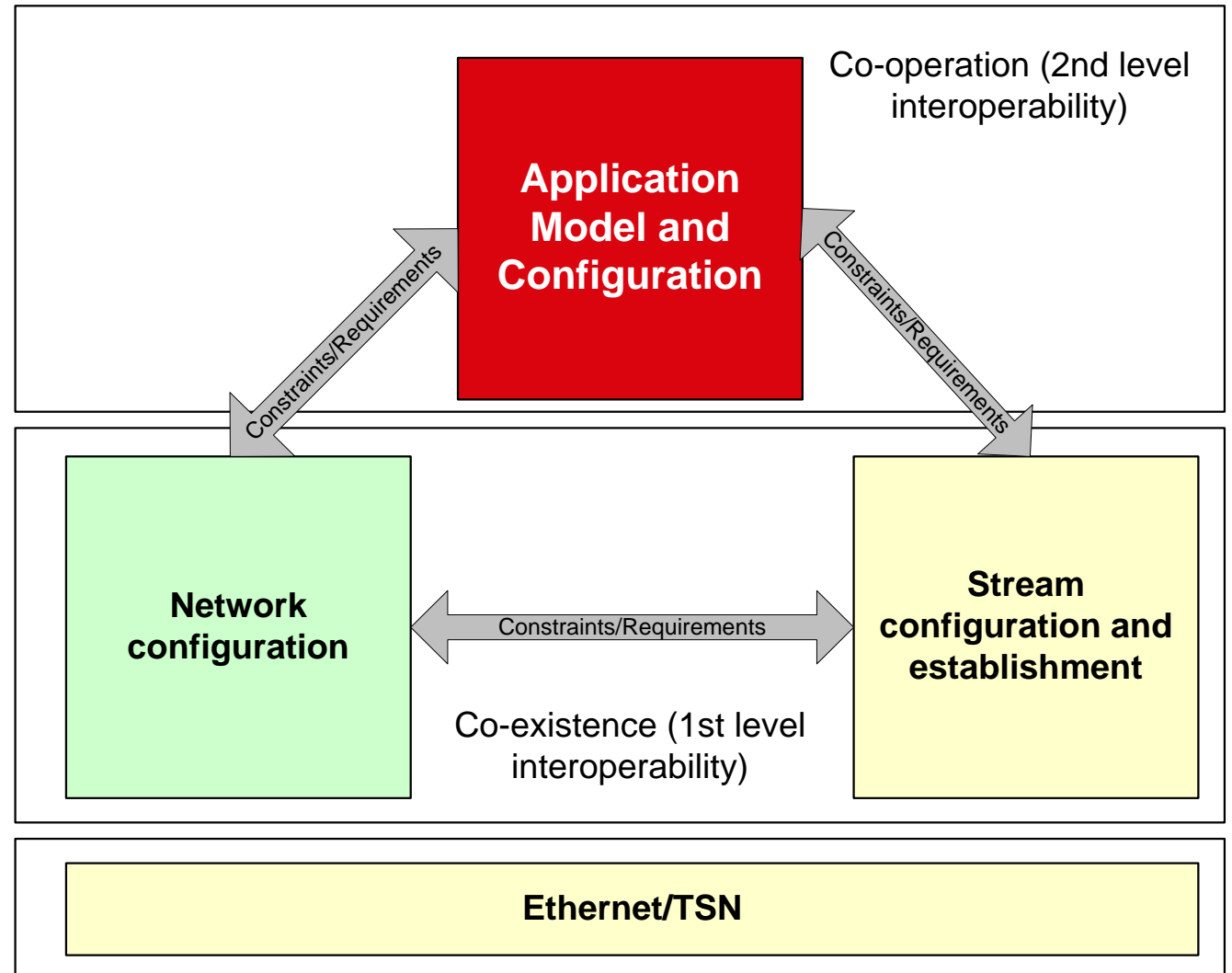**Josef Dorr / Günter Steindl**
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Interoperability Introduction

Interoperability issues for co-existence and co-operation:

- Application model and configuration
- Network configuration
- Stream configuration and establishment

Application Model and Configuration is essential for co-operation and impacts

Network configuration and

Stream configuration and establishment

and vice versa.

Application Model and Configuration Constraints/Requirements are identical in any location within the production hierarchy (machine, cell, …).

Co-operation (2nd level interoperability)

Application Model and Configuration

Constraints/Requirements

Constraints/Requirements

Network configuration

Constraints/Requirements

Stream configuration and establishment

Co-existence (1st level interoperability)

Ethernet/TSN

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IEC/IEEE 60802 JP

Network Configuration and
Stream Configuration

- A vendor independent solution is required

  - ➢ TSN-IA Profile selects the to be supported managed objects
    - – IEEE 802.1Q-2018
    - – IEEE 802.1AS-rev
    - – IEEE 802.1AB
    - – YANG models preferred

  - ➢ TSN-IA Profile selects the to be supported access protocol for the managed objects
    - – If IP based to be supported: IP address assignment modes need to be defined

  - ➢ Devices need to be up and running by configuring the above stated managed objects only
    - – May require an "TSN-IA Profile Mode" managed object

  - ➢ Preconfigured streams shall be supported
    - – Are the managed objects already defined?

Network Configuration and Stream Configuration

- Where can the 60802 JP get the list of managed objects from?
  - Is YANG available for all needed managed objects?
  - Is persistence defined for managed objects?

- Where can the 60802 JP get the list of possible access protocols for the managed objects from?

- Where can the 60802 JP get the list of possible IP address assignment protocols from?

- Where can the 60802 JP define additional managed objects if needed?

Thank You!

Questions?